Public Water System Supervision Program Review
February 15, 2008

1. Background

Purpose

Reviewing performance in implementing the Public Water System Supervision Program takes more than compiling statistics – circumstances and characteristics of both the local health unit and the water systems under that unit's supervision vary greatly. The purpose of this guidance is to help standardize evaluating how local health units deliver public water supply protection services to recognize those offices providing excellent service, identify areas for improved performance and to establish proactive measures for those offices demonstrating significant deficiencies in providing public health protection. Much of what is presented here intentionally borrows from familiar protocols including those in use by individual field coordinators, those in use for water systems such as capacity development and sanitary surveys and those used in evaluating programs like data verifications and audits.

Components of Program Evaluation

Local Health Unit Review Reports. Standardized templates that are updated to reflect evolving water system supervision requirements are a key tool to facilitating comprehensive and continuing oversight of local unit program implementation. This is the key document that borrows from the best of existing quarterly visit field coordinator reports. Each of the following components is used to support this overarching statement of local health unit performance. This version has been modified to include a comprehensive list of program responsibilities – prior versions were consolidations of focus topics.

Performance Measures. Indicators of performance provided by the Bureau of Water Supply Protection are intended to support evaluations by pointing out where performance indicators deviate from established benchmarks. These indicators are to assist field coordinators in framing questions or providing better understanding of how the local unit is uniquely delivering public health services. Many of these indicators will be used to support specific elements addressed in the standardized quarterly visit report. Do not emphasize rankings! These are provided to guide program reviews and assist in determining where improvements need to be made.

Drinking Water Enhancement Grant Program Tracking. Many expected tasks can be addressed by numerical tracking based on SDWIS data content. Currently the DWE tracking spreadsheets include 60 separate measures. These are all tracking measures that look at events completed over the course of four quarters. The purpose is to monitor that expected tasks are being completed on time.

Overall Program Review. A new component that is to be included in the Local Health Unit Review Reports is an overall assessment summary. Performance measures, DWE tracking, and the list of program elements reviewed during a review, each supports an assessment of the local program implementation. An overall evaluation requires integration of field experience with each of these measures and consideration of additional measures of local program capacity. This portion summarizes program effectiveness using each of the leading components to justify a classification of performance.

Outcomes. In order to be effective, specific outcomes are needed to make evaluations useful. Each of the components can identify specific problems and related actions. Collectively these actions can support outcomes to direct the local program. Outcomes will range from recognition of excellent performance, positive program assets, program constraints, recommended improvements, significant program deficiencies with corrective action schedules, program verification audit required, intervention actions between local government administrations and the Department, and proposed recovery of DWE funds.

2. Review Report Outline

Elements of this outline represent the cumulative listing of topics most recently included in reviews. It is intended to be updated annually and may need to be amended to address topics that arise as needed by the bureau or field coordinators.

1. Introduction
2. Sanitary surveys
3. Program Overview
    a. Drinking Water System Inventory
    b. Violations
    c. Enforcement Actions
    d. Sample Schedules
    e. Sample Results
4. Water System Compliance by Program Areas
    a. Operator Certification
    b. Capacity Development
    c. Emergency Response Plans (ERP) and Vulnerability Assessments (VA)
    d. Complaint Records
    e. Emergency Response Preparedness and Capabilities
    f. Technical Assistance Capabilities
    g. Cross connection control
    h. Surveillance Sampling
    i. Operation reports
    j. Public Water System Approvals
    k. Residential Sanitation
5. Water System Compliance by Rule
    a. Annual Water Quality Reports (AWQRs)
    b. Arsenic Rule
    c. Asbestos
    d. IOCs, VOCs, SOCs
    e. Public Notification Rule
    f. Total Coliform Rule
    g. Nitrate Rule
    h. Surface Water Treatment Rule
        i. Ground Water Under the Direct Influence of Surface Water (GWUDI)
    i. Interim Enhanced Surface Water Treatment Rule (IESWTR) and Long Term 1 (LT1) Enhanced Surface Water Treatment Rule
    j. Stage 1 Disinfectants and Disinfection Byproducts Rule (Stage 1 DBPR)
    k. Long Term 2 (LT2) Enhanced Surface Water Treatment Rule and Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR)
    l. Filter Backwash Rule
    m. Lead and Copper Rule
    n. Radionuclides Rule
6. Program Management Review
7. Overall Capacity and Program Performance
8. Closing/Conclusions

3. Review elements and related guidance

This section includes a general template and guidance of what should be addressed in a comprehensive LHU review. Prior to the review, pull available SDWIS reports and downloads – every DWE tracking measure is available in the comprehensive download query set. Call Compliance or Information Systems staff prior to the evaluation to review issues with Central Office and to schedule on-site support times.

Introduction

Document date of visit and participants. List any major themes to be addressed, training provided, or objectives to be achieved.

Sanitary Surveys

In this section Assess performance in conducting sanitary surveys and meeting the required schedules. This section is especially important in providing opportunities for you to evaluate staff performance and capability. (Refer to PWS 180, 184, and 184 Supplemental)

The schedule of sanitary surveys is provided in the DWE spreadsheet by system characteristic (B1, C1-6, see table below). Specific lists of systems referenced in each DWE spreadsheet line are in the SDWIS comprehensive download enhancement queries. Refer the PWSS Measures – Sanitary Surveys and Waivers for performance summaries from 2007.

Review what is required in the current timeframe for this LHU. Are sanitary surveys scheduled appropriately? (See the definitions section of the DWE spreadsheet for requirements which are based on EHM PWS 180 and on the revised LHU Measures which expresses the number of completed sanitary surveys against the number of expected). Are reports completed on time and appropriate to the deficiencies and violations found? Recording times are provided in the LHU Measures spreadsheet which measures the time from the site visit date to the last update timestamp in the site visit record. Do sanitary surveys address all eight required assessment categories (over the course of the required timeframe)? What areas need additional attention (e.g., are all systems with waivers being addressed)?

Review the site visits made as part of training in the relevant time period (optional). As part of the review, indicate whether all information and reports were provided for verification and the accuracy of those reports (basic information; sample schedule; data quality report; locational data; violations; deficiencies). Assess the following: overall system condition; technical proficiency of staff; specific issues addressed; improvements made

B. Compliance Activities		Number
1. Sanitary Surveys completed on systems with waivers	Disinfection waivers on record	
C. Sanitary Surveys Completed		
1. Filtration Avoidance	Annually	
2. Community Water Systems		
a. Surface Supplies	Annually	
b. Groundwater Supplies	Biennially	
c. Purchase with treatment	Every 5 Years	
d. Purchase without treatment	No Frequency	
3. NTNC		
a. Surface Water	Annually	
b. Ground Water	Every 5 Years	
4. Non-Community Water Systems		
a. Surface Water	Annually	
b. Ground Water	Every 5 Years	
5. Bottled Water Facilities	Annually	
6. Non-Public Systems	No Frequency	

in how the survey was conducted; subsequent entry of site visit, tracking of deficiencies, and correspondence with water system within the required timeframe. Written inspection reports must be provided within 45 days for funding performance measures (EHM PWS 180; Part 40-2 requirement), however reports will be needed well in advance of this requirement should any deficiencies be noted that require resolution.

LHU evaluation criteria: required sanitary surveys are being conducted; surveys are comprehensive; reports are timely and well-written; deficiencies are correctly noted and tracked; violations are cited; appropriate field forms are provided.

LHU staff evaluation criteria: technical proficiency; competency in field exercise; completeness and quality of reporting; timeliness of reporting; ability to address deficiencies and violations.

Include a summary of sanitary survey conducted with LHU staff with date, personnel and findings. Attach a copy of the resulting complete record from SDWIS Site Visit module. Include instruction for tracking deficiencies and identify staff training needs.

Program Overview

Summarize discussion points / findings for each item reviewed during the review. The summaries should include pertinent specifics, such as system names, dates of actions, further actions required, etc. Findings can be summarized in table and/or paragraph formats or by reference to spreadsheets.

Drinking Water System Inventory

Evaluate whether water system information is complete and accurate. Use site visit and quality reports to focus on specific types of information that may be missing or inaccurate. Sample points need specific attention for eDWR. Determine whether information is updated as changes are known, such as populations and system interconnections. Compare information against system's Annual Water Quality Report. Updates are made in conjunction with AWQRs and sanitary survey reviews.

Assess how many data errors are on the quality report to direct the appropriate training and to characterize overall program implementation (see PWSS Measures – Data Errors for reference and the complete list of errors in the comprehensive download). List those elements that are specific data errors and establish deadlines for correction.

Are all water systems entered into SDWIS? Information for the water system is current and accurate. Changes in population are made and evaluated against applicability of regulations. Remember that population changes may affect the frequency of sampling for other rules. For instance, if a system's population changes from 980 to 1,001, the system is then required to collect two TCR samples per month rather than one. Include a review of outstanding data issues as indicated by file inspection and issues listed in the quality report.

Violations

This section is a general assessment of compliance – specific rule-based assessments are done under individual rule implementation sections. The objective here is to generally assess how violations are handled in the LHU.

Use the violation performance measure to guide the evaluation. Many programs that are being run successfully are experiencing violation measures in the 0.8 to 2.0 violations per water system per year range (see PWWS Measures – Violations). Exceptions do exist and our objective should be to have fewer violations over time, but that is the range based on recent empirical data. Compare violations against the violation metrics – is the number of violations reasonable for this office? Low numbers of violations may be due to a well-run program, the type of systems and effect of large consolidated systems, partial program implementation such as a difference in oversight between municipal systems and permitted facilities, or failure to address violations altogether.

Review the total listing of violations using SDWIS Add On reports. Determine if the number of violations is appropriate according to the water system type, and to the types of violations. Is the number of violations substantially different for Community versus Non-community water systems? Is there a difference between public health hazard violations and monitoring and reporting violations? (some LHUs may not be reporting M&R violations). Check the violations posted on the NYS DOH annual compliance report or on EPA's Envirofacts to let the LHU know about public reporting requirements. It is essential that all violations be issued and reported to meet the expectation of public accountability, the last barrier in the SDWA multi-barrier approach to drinking water protection. Remember that a violation that is not reported is as if the violation was never issued.

Are violations correctly cited? How are MORs tracked and handled? Is there an apparent effort made to avoid issuing violations when violation conditions existed (inappropriate application of discretion), or are all violations cited as required? Are proactive steps taken to advise systems how to avoid violations (re-issuance of sample schedules for outstanding samples, active intervention for probable MCL exceedances, effective delivery of training, and anticipating certification expirations are all examples of proactive measures. Evaluate when violations are entered – is it within required timeframes, or is violation entry done as part of the normal business flow as they are determined? Absences of violations, lack of understanding of violations and rules, or late entry of violations are all potentially severe failures that may require a Data Verification Audit.

Enforcement Actions

Are the numbers of enforcement actions reasonable or understated (see PWSS Measures – Enforcements for an overview)? If the dates of enforcement actions always match the violation determination date, review whether subsequent enforcement actions should have been taken, or if data entry is inappropriately controlling how enforcement is managed. Is each system returned to compliance in a reasonable period of time? Are there violations that remain open for a very long time that should be addressable? Determine whether violations are unaddressed, addressed or returned to compliance. Addressed violations must have an enforceable action that is legally binding (signed bi-lateral compliance agreement or compliance order with penalty authority). Are formal enforcement actions correctly initiated that are consistent with ADM2 and PWS 239 requirements? Are significant non-compliers identified and addressed? Are there any systems with a large number of unaddressed violations indicating a need for additional comprehensive compliance?

Sample Schedules

Correct sample schedules are integral to successful program implementation. EPA's evaluation and our own state experience shows marked improvement in compliance when systems have direct notification of monitoring requirements. Use this section to generalize how sample schedules are being handled across all rules and systems. Only systems without TCR schedules are included in the

PWSS Measures – Schedules; although this is an excellent indicator of how much attention is paid to completing sample schedules this is a short-term measure that will be updated in future releases.

Systems remain responsible for determining their own requirements. Accurate sample schedules are needed to use CDS and are required of all local units. Sample schedules must be based on the standard monitoring framework and use valid monitoring periods. Monitoring requirements should never be established locally. Use the sample schedule measure for TCR schedules as a guide to determine completeness of sample schedules. Sample schedules must correctly identify sampling points that follow standard naming conventions. Are all public water systems provided with a written sample schedule report at the beginning of the year and a follow up reminder of outstanding requirements at the end of the year?

Environmental laboratories now have access to all sample schedule records – omissions are obvious and indicators of program failures. Each LHU will have to be certified as having complete and accurate sample schedules to participate in eDWR. If sample schedules are not complete, establish a plan to complete the schedules that reflects the program's organization; indicate if a particular group of sample schedules are not entered into SDWIS and the timeframe for completion. If local tools are still used to notify systems of sample requirements, the program is only being partially implemented – direct the program to use SDWIS. Refer local units to the EPA monitoring requirement on-line tool for assistance and training as appropriate (http://www.rulewizard.org) .

Sample Results

Sample entry will vary widely based on past history and whether a local database is being used to record the sample results. Most sample entry is not time-consuming and plans to do that entry need to be established. Annual sample requirement like nitrate are easy to complete as are the sample summary data including coliform and lead and copper. Much of the sample entry will diminish with eDWR, but each LHU must demonstrate that all pieces are in place for correct operation of CDS by having sample schedules and samples in the data system. A water system group will need to be established to test readiness for eDWR. In addition, specific contaminants need to be entered for larger systems to meet public health tracking requirements. Provide information on entry of generic sample points to facilitate implementation of eDWR. All sample data is expected to be entered for all nine DBPs, nitrates, arsenic and lead and copper and TCR summaries.

Water System Compliance by Program Areas

Operator Certification

Information on operator certification is available in the error report and in the comprehensive download (also see PWSS Measures – Operators for relative performance). Review which systems do not have certified operators or operators in responsible charge. Having no qualified operator garners a type 12 violation, while not having a designated operator in responsible charge is a state 'SQ' violation. Finally, determine if the correct number and certification levels are available for each system. Violations need to be issued for those systems without appropriate grade level coverage, citing an 'SY' state-type violation. Determine if violations and appropriate enforcement actions have been issued and taken for these systems. Review how a list of expiring certifications can be produced and used to prevent loss of certification (see Subpart 5-4).

Capacity Development

Evaluate the status of capacity development reports. Reports need to be completed for any new systems and are to be reviewed and updated with completion of each sanitary survey. List any systems lacking a capacity development form, along with a completion deadline and directions for filing.

Emergency Response Plans (ERP) and Vulnerability Assessments (VA)

Updated ERPs and VAs for systems that serve over 3,300 people were due by January 1, 2008. Indicate if the LHD received all updates by the deadline and if they have reviewed them using the guidance document provided by BWSP on 9/6/07. Check the data quality report for those systems not flagged as needing an ERP – population changes may list systems that were not previously identified. Determine if a system's disinfection waiver constitutes a vulnerability that should be addressed.

Complaint Records

Complaints are to be maintained in an appropriate log (Part 40-2 requirement). Review the compliant log with particular attention to systems receiving a large number of related complaints. Correlate to violations, capacity development reports or other system information to determine if substantial problems exist with specific systems. Determine whether complaints with likely public health hazards are effectively handled.

Emergency Response Preparedness and Capabilities

How prepared is the LHU for emergencies? Are communication protocols followed correctly. Is there evidence of capabilities to handle distribution system breaks, power outages, source depletion and flooding? Are water supply emergency plans in place and exercised every two years (Part 40-2 requirement)? (See PWS 151 and PWS 21)

Technical Assistance Capabilities

Determine whether the LHU proactively provides technical assistance and whether staff is proficient in handling water system technical issues.

Cross connection control

Cross connection control programs are required of every community water system (Part 40-2 requirement; PWS 12).

Surveillance Sampling

Is the LHD conducting surveillance sampling in accordance with EHM PWS 30? Surveillance sample(s) may be used as a compliance sample(s) only when it has been incorporated into the systems sampling plan and not as a substitute when the system fails to collected a required sample (Part 40-2 requirement; PWS 30).

Operation reports

Are water systems complying with the requirement to complete and submit monthly reports by the 10th of each month? Are these reports logged and reviewed within 10 days of receipt (40-2 requirement). How are operation reports tracked? Are the chlorine residuals matched to the coliform sample information? (The prior EPA audit found that though chlorine residuals were taken, we could not demonstrate that these were taken at the time the coliform samples were taken). Are the 'flags" for

selecting water systems subject to MORs maintained? Is the SDWIS Add Ons feature for tracking MORs being used? Are violations cited promptly and then closed out upon receipt of MORs? Are fluoride results submitted from applicable systems and provide to the Bureau as required (PWS 150; DOH 360CFL)? Some offices enter a violation and then invalidate the violation following receipt – this is an incorrect practice. Some offices do not close out MOR violations. These violations are likely to become included in future SNC calculations.

Residential Sanitation

- OWTS

Technical assistance provided consistent with design standards.

- Realty Subdivisions

Timely completion of plan review and approval, site evaluations, and construction inspections (Part 40-2 requirement).

- Well requirements (Appendix 5B)

Public Water System Approvals

- Plan Reviews

Are plan reviews conducted in a timely manner and prior to construction? Are appropriate communications with consultants and applicants made, along with appropriate tracking and recording of reviews? Are reviews completed within 45 days of receipt (40-2 requirement)? Are reviews made with appropriate consideration of existing and pending rule requirements and with respect to potential impacts on existing treatments for other rules (e.g., chloramines impact on orthophosphate treatment)? (see PWS 131)

- Well standards and requirements (Appendix 5D)
- New Systems Reviews

Water System Compliance by Rule

Annual Water Quality Reports (AWQRs)

Evaluate whether AWQRs were submitted on time and whether the content of AWQRs were evaluated. Review the content of sample AWQRs against SDWIS data. Failure to provide an AWQR by May 31st to consumers receives a '71' violation, while failure to certify by September 1st receives a '72' violation. A system that does not do an AWQR and receives a '71' should not receive a '72' for failure to certify. AWQR tracking is done now in SDWIS Add Ons - compliance schedules will start to be used in SDWIS 2.0 to track AWQR submission. Determine if the Add Ons are being used correctly to track AWQRs and if violations are being issued as required and entered in SDWIS within the 45 day time frame.

Arsenic Rule

If there are systems that have exceeded the MCL for arsenic, list systems and indicate their status. Determine if violations, enforcement actions and compliance schedules have been established. Are arsenic MCLs being calculated correctly based on running annual averages (RAA) of quarterly samples and are any violations being correctly assigned to only the quarter within which the RAA-based calculation exceeded the MCL? Several LHUs incorrectly cite every quarter used in the calculation. If any individual sample results have exceeded the MCL level, evaluate how the level of

arsenic can be reduced now, before the RAA exceeds the MCL. Check to see that the sample schedule is correct.

Asbestos

Does the LHU have correct sample schedules in SDWIS? Systems with waivers must have nine year sample schedules to denote that a waiver is in place. Waivers need to be reviewed and renewed using the following criteria (see question #6 in the Part 5 questions and answers guidance): 1) Lack of potential asbestos contamination of the water source; 2)No use of asbestos cement pipe for finished water distribution and noncorrosive nature of the water. (see PWS 157 and PWS 57)

IOCs, VOCs, SOCs

Determine if monitoring requirements are correct and included in the sample schedule. Are samples collected on time and reported within 10 days of the end of the compliance period? Monitoring and reporting violations are type 03. MCL violations are either type 01 for Single Sample violation and type 02 for Average MCL violation. Type 04 violations are used when Monitoring or Reporting check/repeat/confirmation samples are not taken. When an MCL violation is issued, determine whether appropriate public notice was made, revised sampling requirement was correctly applied, violations entered into SDWIS with correct analyte codes and sample schedules updated.

Public Notification Rule

Violations receive appropriate notification according to Tier. If a system does not conduct PN, post or publish PN on-time, submit PN certification to State on time, use required language or content, use the proper method of delivery, or post/publish repeat notices, there is a PN violation. Use the following violation reference: 7500 75, Failure to provide PN, linked to another violation; and 7500 76, Failure to provide PN, not linked to another violation. (see Public Notification Rule - PWS-33, PWS-45, ADM-2).

Total Coliform Rule

Have the TCR sample schedules been updated and do they reflect current populations? Do sample schedules correctly list a single distribution system sample point for all TCR sampling? Are sample summaries provided in SDWIS?

If the PWS did not collect any routine samples, was a type '23' violation issued and recorded? If the PWS did not collect enough routine samples, was a type '24' violation issued and recorded? If the PWS did not collect any repeat samples, was a type '25' violation issued and recorded? If the PWS did not collect enough repeat samples, was a type '26' violation issued and recorded? When detected, are monthly MCL ('22') or acute MCL ('21') violations with the correct '3100' analyte code issued along with correct public notifications and reporting to SDWIS? Many LHU's incorrectly cite MCL violation types or incorrect analyte codes. (see 'TCR Orange Book'; PWS 32, PWS 35).

Boil Water Advisories

Are boil water advisories issued and tracked appropriately? Is the 'SS' violation code used correctly to track these precautionary public health measures? Does the number or type of boil water advisories suggest additional capacity or infrastructure needs? (see PWS 22).

Disinfection Waivers
Systems with disinfection waivers need to be reviewed to ensure that they meet waiver criteria. Those that can initiate treatment should do so. Sample schedules need to reflect the unique monitoring requirements associated with these systems. Review the quality report for the list of systems without a disinfection objective or a disinfection waiver. List all systems and their status in the report or as an attachment. Every system with a disinfection waiver must have a sanitary survey each year. A list of systems and their sanitary survey status is provided in the SDWIS comprehensive download DWE queries. (see PWS 22).

Nitrate Rule

The nitrate rule has one of the highest compliance rates of all rules. Are correct sample schedules entered in SDWIS? Evaluate whether entry point samples are collected and reported within required timeframes. If samples are not taken or reported, has an 03 monitoring violation with analyte code 1040 been issued? If an MCL has been exceeded, was the MCL based on the average of a confirmation sample and the original sample and has a correct MCL violation been issued and recorded? If sample results are greater than half the MCL, was the sample schedule adjusted to quarterly samples?

GUDI systems are required to conduct initial quarterly samples as are surface water systems. How have systems with recent GUDI determinations been handled? Nitrate samples must reflect current delivery of consumable water (entry point). Do not allow wells to add to production before testing the well and its treatment off-line. Nitrification has occurred in some well's filters and have been allowed to add to finished water – this can result in a violation.

Surface Water Treatment Rule

For surface water systems with filtration avoidance, review the status of avoidance requirements. Many systems will loose filtration avoidance under Stage 1 DBP MCLs. Review this information carefully to ensure that avoidance criteria are being maintained. Some systems with filtration avoidance did not meet avoidance criteria for protracted periods without the LHU being aware of the need to rescind avoidance (see original 1993 PWS 45)

Ground Water Under the Direct Influence of Surface Water (GWUDI)
Some offices appear to be revisting those sources that were previously screened as not GUDI. Determine whether this is the best use of resources. For those GUDI determinations outstanding, establish deadlines for completion of determinations. For those already determined to be GUDI, determine their violation timeline and compliance schedule status. Assess whether system notification of GUDI status was completed along with compliance schedules. Attempt to have treatment in place prior to the 18 month timeline to avoid violations. Do not issue a type 42 violation prior to the 18 months expiring. Use the new guidance on treatment log removal values to direct appropriate treatment design.

List the water systems that still have not started GUDI evaluations. List systems that have pending GUDI determinations. Establish a schedule of completion for both along with determination methods to be used. (see PWS 42).

List water systems determined GUDI positive more than 18 months ago. Since their 18 month deadline has passed, and appropriate treatment is not in place, they must be cited in writing with a violation of the SWTR as per 5-1.30(b) and placed on a time table of compliance. A type 42 violation must be recorded in SDWIS with the appropriate enforcement actions.

Interim Enhanced Surface Water Treatment Rule (IESWTR) and Long Term 1 (LT1) Enhanced Surface Water Treatment Rule

Please refer to the list of IESWTR violation codes, all of which have analyte code 0300.

- *29 Response to individual filter trigger monitoring and reporting*
- *37 Failure to profile or consult with state (disinfection change)*
- *38 M/R IESWTR*
- *43 TT, Exceedance of 1 NTU*
- *44 TT, >5% Exceed .3 NTU*
- *47 TT, Construction of uncovered finished storage facility*
- *48 TT, Failure to meet Cryptosporidium site specific conditions.*

Individual filter effluent monitoring has been an issue in prior EPA audits – a certification that individual monitoring was done is needed (see MOR forms), while the results do not need to be reported. The combined filter effluent must meet the performance turbidity standard for the specific treatment type.

Stage 1 Disinfectants and Disinfection Byproducts Rule (Stage 1 DBPR)

Many new violations are now falling under this rule. Nearly half of all SNCs are based on HAA5 or TTHM violations. Ensure that the sample schedules are correct in SDWIS. Ensure that the schedule is set up with correct analyte group code (DBP1) with a sample points on the distribution system following the correct sample point naming convention (DBP1, DBP2, DBP3 and DBPMAX as applicable to system size), and sampling point subschedules. Refer to Canton Village (NY4404381) for a single sample at maximum residence or Glens Falls City (NY5600104) for a four sample per quarter examples.

Long Term 2 (LT2) Enhanced Surface Water Treatment Rule and Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR)

Review the status of systems for this rule. List systems that need specific actions to be completed. Determine if DBP data has been entered as required. Assist the LHU with data recording needs for the EPA system.

- *The deadline for schedule 4 systems (<10,000 population) for Stage 2 is/was April 1, 2008. Indicate if there are systems that did not submit their Initial Distribution System Evaluation (IDSE) plan or receive a Waiver by the deadline and what their status is.*
- *The deadline for schedule 3 systems (10,000 – 49,999 population) for LT2 was January 1, 2008. Indicate if there are systems that did not submit their source water monitoring plan by the deadline and what the status is.*
- *The deadline for schedule 4 systems (<10,000 population) for LT2 is July 1, 2008. Systems must submit their E. Coli source water monitoring plan by that date and begin sampling by October 1, 2008.*

Filter Backwash Rule

Determine if there are any filter backwash issues, particulary as related to percent backwash allowed into the treatment train. Use the following violation reference: 40 - TT, failure to recycle to approved location; and 39 - M/R, failure to notify state of recycling status.

Lead and Copper Rule

Evaluate rule implementation. Are sample schedules correct? If on reduced monitoring, are samples collected in the same year and within the correct sampling season? Are violations and enforcement actions correct and entered on time? For systems with AL exceedances, have appropriate follow-up requirement been met? If not, have violations been cited and recorded? (see PWS 50 and PWS 52).

List systems with AL exceedances and status of follow-up requirements. Review the status of 'waivered' systems with respect to certifications, sample results, and correct entry of a nine year sample schedule (PWS 211). 90^{th} percentile results are required to be entered in SDWIS. Check the status in the quality report or in the comprehensive download. Where a parent system has agreed to conduct sampling in a consecutive connection system (under separate ownership and control), ensure that an agreement is in place reflecting this.

Radionuclides Rule

Evaluate rule implementation. Sampling schedules need to be determined and entered into SDWIS for Gross Alpha, Combined Ra-226/228 and Uranium. Future compliance monitoring schedules are based upon:

- *Grand-fathered data (sample results collected between June 2000 and Dec 8, 2003) -OR-*
- *Initial Monitoring data*

Using either Initial Monitoring data or Grandfathered data, future compliance sampling schedules will be determined using the appropriate flow charts detailed in figures (1 – 4) of the "Flow Diagram for Determining Radionuclide Monitoring".

Initial Monitoring: Initial monitoring must be done at each EPTDS. Grandfathered data must also be for samples collected from the EPTDS, or the sampling point must be determined to be representative of the EPTDS. The initial monitoring period for collecting Ra-228 data has been extended through to December 31, 2008, and consists of 4 quarters of sampling. If the results of each of the first 2 quarters of monitoring is less than the (required) detection limit for Ra-228 (1 pCi/L), then the last 2 quarters of monitoring can be waived.

Compositing: Temporal compositing (by the laboratory) is allowed for initial monitoring for all Radionuclide sampling. Compositing can consist of 2 or 4 quarters of sampling. (Additional information regarding compositing and laboratory costs for radiological testing is available).

Substitution: Gross Alpha results can be substituted for both Ra-226 and Uranium, for initial monitoring and/or future monitoring compliance. If Gross Alpha Results are:

- *less than or equal to 15 pCi/L, substitute the full value of Gross alpha for the Uranium value. (If the Gross alpha result is less than 3 pCi/L, substitute one half the GA result for the Uranium result, no conversion factor is required).*
- *Additional substitution information can be found in the document entitled 'FCdiscussionpts.doc'.*

Program Management

Training Information: Provide a summary of any upcoming water supply training (i.e. sanitary survey course, BEHC, or any rule specific training). Provide a summary of training sessions that have been completed by staff. Documentation here provides a record for future use, assigns importance to training and integrates this work with DWE work plans.

DWE Enhancement Grant: Document the status of DWE ministerial tasks here for work plan completion and status. Summarize experience with DWE and how monies are being used to address issues. Detail how milestones have or have not been met according to spreadsheet tracking. Indicate if any quarterly expenditure and vouchers have not been submitted and their status. Indicate when the DWE work plan was submitted and the approval status. Review the specific measures tracked in the spreadsheet report and related comprehensive download queries where needed. Identify shortfalls and establish completion deadlines.

Overall Capacity and Program Performance

Provide a brief narrative of overall implementation of the drinking water program. Indicate recent accomplishments as well as deficiencies. Discuss issues related to deficiencies such as lack of staffing or necessary training. Provide recommendations for improvement. Include the following categories: Technical Proficiency, Program Oversight and Management, Adequacy of Resources. Examples of potential statements for each category follow. These statements reflect positive evaluations – corresponding negative statements should be used where appropriate.

Technical Proficiency

- *Thorough knowledge of drinking water program rules and regulations*
- *Demonstrates resourceful problem solving protective of public health*
- *Clear understanding of compliance and schedules*
- *Staff training adequate*
- *Proficiency distributed among staff*

Program Oversight and Management–

- *Management is proactive in addressing public health issues*
- *Data systems are integrated in daily business*
- *Water systems notified of monitoring requirements*
- *Records management is timely and complete*
- *Contractual elements met*
- *Management environment conducive to program delivery*
- *Management effort focused and relevant*
- *Proficient in addressing emergencies and disaster responses*

Adequacy of Resources

- *Adequate funds dedicated to program*
- *Access to funds available*
- *Budget includes line items for program elements*
- *Contractual services available as needed*
- *Staff level appropriate to program / Staffing level stable*

Summarize these findings when possible to mark the greatest accomplishments, problems, or constraints since the last review. What are the positive assets or strengths of the program? What is wrong with the program and how severe are the problems? What is preventing the program from addressing deficiencies?

Closing/Conclusions

Outcomes will range from recognition of excellent performance, citing positive program assets, program constraints, recommended improvements, significant program deficiencies with corrective action schedules, program verification audit required, intervention actions between local government administrations and the Department, and proposed recovery or revision of DWE funds. Where recommendations are made in each of the topic areas addressed, reinforce the importance of addressing these rather than repeating them here.